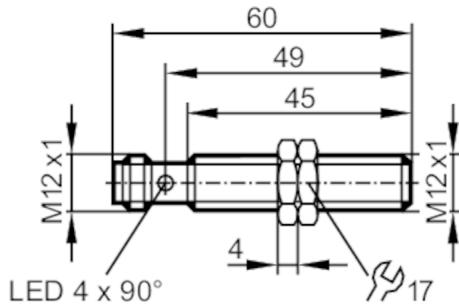


Compact evaluation unit for speed monitoring

DFK33,5BWRKG/IO/US



Product characteristics

Electrical design	PNP/NPN	
Output function	normally open / closed; (configurable)	
Sensing range [mm]	3.5	
Communication interface	IO-Link	
Housing	Threaded type	
Dimensions [mm]	M12 x 1 / L = 60	

Application

Application	simple evaluation of rotating and linear movement with regard to underspeed; blocking	
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Electrical data

Nominal voltage DC [V]	10...30	
Current consumption [mA]	< 10	
Protection class	III	
Reverse polarity protection	yes	

Outputs

Electrical design	PNP/NPN	
Output function	normally open / closed; (configurable)	
Max. voltage drop switching output DC [V]	2.5	
Permanent current rating of switching output DC [mA]	100	
Short-circuit proof	yes	
Overload protection	yes	

Monitoring range

Sensing range [mm]	3.5	
Sensing range adjustable	no	
Operating distance [mm]	0...2.83	

Measuring/setting range

Setting range [Imp/min]	5...24000	
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Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3	
Hysteresis [% of Sr]	10	

DI5027



Compact evaluation unit for speed monitoring

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Reaction times		
Start-up delay	[s]	0...30; (In steps of: 100 ms; default: 15 s)
Max. damping frequency	[Imp/min]	30000
Interfaces		
Communication interface	IO-Link	
Operating conditions		
Ambient temperature	[°C]	-40...85
Storage temperature	[°C]	-25...85
Protection	IP 66; IP 67; IP 68; IP 69K	
Tests / approvals		
EMC	EN 61000-4-2 ESD EN 61000-4-3 HF radiated EN 61000-4-4 Burst EN 61000-4-6 HF conducted EN 55011 EN 60947-5-2	
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Vibration resistance	DIN EN 60947-5-2	20 g (10...3000 Hz) 50 sweep cycles per frequency; 1 octave per minute in 3 axes
MTTF	[years]	668
UL approval	UL approval number	
Mechanical data		
Weight	[g]	27.7
Housing	Threaded type	
Mounting	flush mountable	
Dimensions	[mm]	M12 x 1 / L = 60
Thread designation	M12 x 1	
Material	housing: brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated	
Tightening torque	[Nm]	7
Displays / operating elements		
Display	SIO mode output stage supplied with current IO-Link mode target in measuring range target outside measuring range	
	4 x LED, yellow 4 x LED, yellow 4 x LED, yellow flashing	
Accessories		
Items supplied	lock nuts: 2	

Compact evaluation unit for speed monitoring

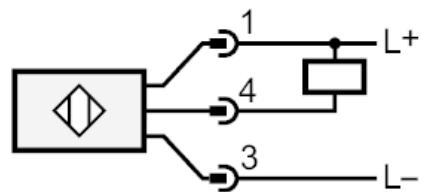
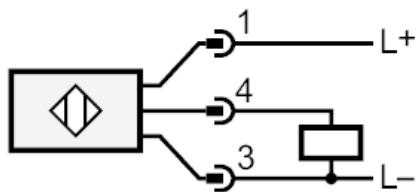
DFK33,5BWRKG/IO/US

Electrical connection

Connector: 1 x M12; coding: A



Connection



4:

OUT / IO-Link